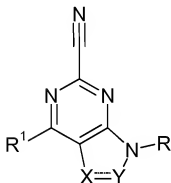


**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1. (currently amended) A compound of formula (I):



(I)

in which:

X is N- or NH-;

Y is :CH, CO, CH<sub>2</sub> or :CNR<sup>2</sup>R<sup>3</sup>, where R<sup>2</sup> and R<sup>3</sup> are independently hydrogen, C<sub>1-6</sub> alkyl or C<sub>3-6</sub> cycloalkyl;

R is arylphenyl or heteroaryl optionally substituted by halogen, amino, hydroxy, cyano, nitro, trifluoromethyl, carboxy, CONR<sup>5</sup>R<sup>6</sup>, SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, SO<sub>2</sub>R<sup>4</sup>, NHSO<sub>2</sub>R<sup>4</sup>, NHCOR<sup>4</sup>, ethylenedioxy, methylenedioxy, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, SR<sup>4</sup> or NR<sup>5</sup>R<sup>6</sup> where R<sup>4</sup> is hydrogen, C<sub>1-6</sub> alkyl or C<sub>3-6</sub> cycloalkyl, R<sup>5</sup> and R<sup>6</sup> are independently hydrogen, C<sub>1-6</sub> alkyl or together with the nitrogen atom to which they are attached form a 5- or 6-membered saturated ring optionally containing a further O, S or NR<sup>4</sup> group;

or R is hydrogen, C<sub>1-6</sub> alkyl or C<sub>3-6</sub> cycloalkyl both of which can optionally contain one or more O, S or NR<sup>4</sup> groups,

R<sup>1</sup> is a group Y(CH<sub>2</sub>)<sub>p</sub>R<sup>7</sup> where p is 0, 1 or 2 and Y is O or NR<sup>8</sup> where R<sup>8</sup> is hydrogen, C<sub>1-6</sub> alkyl or C<sub>3-6</sub> cycloalkyl;

and R<sup>7</sup> is a 5- or 6-membered saturated ring containing one or more O, S or N atoms, aryl or a heteroaryl group containing one to four heteroatoms selected from O, S or N, the saturated ring, aryl and heteroaryl groups all being optionally substituted by halogen, amino, hydroxy, cyano, nitro, trifluoromethyl, carboxy, CONR<sup>5</sup>R<sup>6</sup>, SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, SO<sub>2</sub>R<sup>4</sup>, NHSO<sub>2</sub>R<sup>4</sup>, NHCOR<sup>4</sup>, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, SR<sup>4</sup> or NR<sup>5</sup>R<sup>6</sup> where R<sup>4</sup> is hydrogen, C<sub>1-6</sub> alkyl or C<sub>3-6</sub> cycloalkyl, R<sup>5</sup> and R<sup>6</sup> are independently hydrogen, C<sub>1-6</sub> alkyl or together with the nitrogen atom to which they are attached form a 5- or 6-membered saturated ring optionally containing a further O, S or NR<sup>4</sup> group;

or R<sup>1</sup> is a group NR<sup>9</sup>R<sup>10</sup> where R<sup>9</sup> and R<sup>10</sup> are independently hydrogen or C<sub>1-6</sub> alkyl optionally containing one or more O, S or NR<sup>4</sup> groups, or R<sup>9</sup> and R<sup>10</sup> together with the nitrogen atom to which they are attached form a 5 or 6-membered saturated ring optionally containing a further O, S or N atom and optionally substituted by a second NR<sup>9</sup>R<sup>10</sup> where R<sup>9</sup> and R<sup>10</sup> are independently hydrogen or C<sub>1-6</sub> alkyl or R<sup>9</sup> and R<sup>10</sup> together with the nitrogen atom to which they are attached form a 5 or 6-membered saturated ring optionally containing a further O, S or NR<sup>4</sup>, CO<sub>2</sub>C<sub>1-6</sub> alkyl, CONR<sup>11</sup>R<sup>12</sup> where R<sup>11</sup> and R<sup>12</sup> are independently hydrogen or C<sub>1-6</sub> alkyl, aryl or heteroaryl group optionally substituted by halogen, amino, hydroxy, cyano, nitro, trifluoromethyl, carboxy, CONR<sup>5</sup>R<sup>6</sup>, SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, SO<sub>2</sub>R<sup>4</sup>, NHSO<sub>2</sub>R<sup>4</sup>, NHCOR<sup>4</sup>, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkoxy, SR<sup>4</sup> or NR<sup>5</sup>R<sup>6</sup> where R<sup>4</sup> is hydrogen, C<sub>1-6</sub> alkyl or C<sub>3-6</sub> cycloalkyl, R<sup>5</sup> and R<sup>6</sup> are independently hydrogen, C<sub>1-6</sub> alkyl or together with the nitrogen atom to which they are attached form a 5- or 6-membered saturated ring optionally containing a further O, S or NR<sup>4</sup> group; and pharmaceutically acceptable salts or solvates thereof.

Claim 2. (previously presented)      A compound according to claim 1 in which X is N and Y is :CH.

Claim 3. (previously presented)      A compound according to claim 1, wherein R is C<sub>1-4</sub>alkyl, or phenyl substituted by halogen, SO<sub>2</sub>Me, C<sub>1-6</sub>alkoxy or C<sub>1-4</sub>alkyl.

Claim 4. (previously presented)      A compound according to claim 1, wherein R<sup>1</sup> is a group Y(CH<sub>2</sub>)<sub>p</sub>R<sup>7</sup> where p is 0 and Y is NR<sup>8</sup> where R<sup>8</sup> is hydrogen and R<sup>7</sup> is substituted phenyl.

Claim 5. (currently amended) A compound according to claim 1, wherein R<sup>1</sup> is NR<sup>9</sup>R<sup>10</sup> where R<sup>9</sup> and R<sup>10</sup> are hydrogen or C<sub>1-3</sub> alkyl or together with the nitrogen atom to which they are attached form a 5 or 6-membered saturated ring optionally containing a further O, S or NR<sup>4</sup>.

Claim 6. (previously presented) A compound selected from:

1-[9-(4-Chlorophenyl)-2-cyano-9H-purin-6-yl]-L-prolinamide,  
9-(4-Chlorophenyl)-6-(4-pyrrolidin-1-yl)piperidin-1-yl-9H-purine-2-carbonitrile,  
9-(4-Chlorophenyl)-6-[(3-pyrrolidin-1-ylpropyl)amino]-9H-purine-2-carbonitrile,  
6-(4-Aminopiperidin-1-yl)-9-(4-chlorophenyl)-9H-purine-2-carbonitrile,  
6-[(2-Aminoethyl)amino]-9-(4-chlorophenyl)-9H-purine-2-carbonitrile,  
9-(4-Chlorophenyl)-6-(dimethylamino)-9H-purine-2-carbonitrile,  
9-(4-Methylphenyl)-6-pyrrolidin-1-yl-9H-purine-2-carbonitrile,  
9-(4-Methoxyphenyl)-6-pyrrolidin-1-yl-9H-purine-2-carbonitrile,  
9-(4-chlorophenyl)-6-pyrrolidin-1-yl-9H-purine-2-carbonitrile,  
9-(4-Chlorophenyl)-6-(ethylamino)-9H-purine-2-carbonitrile,  
tert-Butyl 4-[9-(4-chlorophenyl)-2-cyano-9H-purin-6-yl]piperazine-1-carboxylate,  
9-(4-Chlorophenyl)-6-piperazin-1-yl-9H-purine-2-carbonitrile,  
9-(2-Chlorophenyl)-6-morpholin-4-yl-9H-purine-2-carbonitrile  
9-(3,4-Difluorophenyl)-6-morpholin-4-yl-9H-purine-2-carbonitrile,  
9-(4-Isopropylphenyl)-6-morpholin-4-yl-9H-purine-2-carbonitrile,  
9-(4-Methoxyphenyl)-6-morpholin-4-yl-9H-purine-2-carbonitrile,  
9-(3-Chlorophenyl)-6-morpholin-4-yl-9H-purine-2-carbonitrile,  
9-[4-(Methylsulfonyl)phenyl]-6-morpholin-4-yl-9H-purine-2-carbonitrile,  
6-[(4-Chlorophenyl)amino]-9-ethyl-9H-purine-2-carbonitrile,  
9-(4-Chlorophenyl)-6-morpholin-4-yl-9H-purine-2-carbonitrile,  
8-Amino-6-[(4-chlorophenyl)amino]-9-ethyl-9H-purine-2-carbonitrile,  
8-Amino-9-(4-chlorophenyl)-6-morpholin-4-yl-9H-purine-2-carbonitrile,  
9-(4-Chlorophenyl)-6-morpholin-4-yl-8-oxo-8,9-dihydro-7H-purine-2-carbonitrile,  
9-(4-Chlorophenyl)-8-(dimethylamino)-6-morpholin-4-yl-9H-purine-2-carbonitrile,

and pharmaceutically acceptable salts thereof.

Claim 7. (cancelled)

Claim 8. (cancelled)

Claim 9. (cancelled)

Claim 10. (previously presented) A pharmaceutical composition which comprises a compound of the formula (I) as defined in claim 1 or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable diluent or carrier.

Claim 11. (previously presented) A method for producing inhibition of at least one chosen from cathepsins S, K, L, F and B in a mammal comprising administering to said mammal an effective amount of a compound as defined in claim 1, or a pharmaceutically acceptable salt thereof.

Claim 12. (previously presented) A method for treating pain in a mammal in need of such treatment comprising administering to said mammal an effective amount of a compound as defined in claim 1, or a pharmaceutically acceptable salt thereof.

Claim 13. (previously presented) A method for inhibiting Cathepsin S in a warm blooded animal comprising administering a compound of the formula (I) as defined in claim 1 or a pharmaceutically acceptable salt thereof to a warm blooded animal.

Claim 14. (new) A pharmaceutical composition which comprises a compound of the formula (I) as defined in claim 6 or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable diluent or carrier.

Claim 15. (new) A method for producing inhibition of at least one chosen from cathepsins S, K, L, F and B in a mammal comprising administering to said mammal an effective amount of a compound as defined in claim 6, or a pharmaceutically acceptable salt thereof.

Claim 16. (new) A method for treating pain in a mammal in need of such treatment comprising administering to said mammal an effective amount of a compound as defined in claim 6, or a pharmaceutically acceptable salt thereof.

Claim 17. (new) A method for inhibiting Cathepsin S in a warm blooded animal comprising administering a compound of the formula (I) as defined in claim 6 or a pharmaceutically acceptable salt thereof to a warm blooded animal.